



State of New Hampshire  
DEPARTMENT OF ENVIRONMENTAL SERVICES

6 Hazen Drive, P.O. Box 95, Concord, NH 03302-0095  
(603) 271-3406 FAX (603) 271-7894



November 26, 2002  
**Letter of Deficiency**  
DAM #021.03

Ms. Karen Gilbert  
Sargent Lake Association  
P.O. Box 250  
Belmont, NH 03220-0250

RE: Sargent Lake Dam, Belmont

Dear Ms. Gilbert:

The Department of Environmental Services, Dam Bureau (DES) consistently strives to enhance the safety of dams in New Hampshire through its dam safety program. One of the many instruments that play a part in reaching this goal is our inspection program. DES is forwarding this correspondence to you to advise you that in accordance with RSA 482:12 and Env-Wr 502.02, an inspection of the subject dam was conducted on October 1, 2002. During this visual inspection and/or file review, the following items were observed:

The entire length of both the left and right embankments, which include the upstream face, crest and downstream face are overgrown with large trees. The only cleared area is the crest of the right embankment. The entire length of the dam is approximately 420 feet of which the embankment consists of at least 300 feet of the overall length of the dam;

There was some construction debris located on the crest of the dam to the right of the spillway. The debris included a bucket, tarps and wood;

The condition of the low level outlet is unknown.

4. There are no design or as-built plans on file with the DES.

There was seepage evident in the historical location at the toe of the stone downstream face at the left end of the concrete spillway;

6. There is no operation and maintenance plan (O&M) on file with the DES;
7. There was a 1/8 inch wide crack on the emergency spillway cap; and
8. There was a crack on the top of the downstream stone masonry wall located at the left end of the spillway.

DES believes that the above deficiencies can be corrected by performing the following items by the indicated schedule:

**January 1, 2003:**

Remove the construction debris from the crest of the dam located to the right of the spillway.

- 2 Implementing a monitoring plan to document the seepage located at the toe of the stone masonry wall at the left end of the spillway. At a minimum quarterly visual inspections should be conducted and document approximate seepage flow and impoundment elevation. This information is important for future comparison to determine if this condition worsens over time;

Prepare and submit to the DES a written operations and maintenance procedure plan. The plan should describe the control of impoundment levels, monitoring and maintenance procedures, and identify emergency contact personnel. Refer to the enclosed guidelines;

- 4 Update and test the EAP and contact DES EAP Coordinator (Ms. Bethann McCarthy) prior to updating this document;

**June 1, 2003:**

5. Remove all trees and brush from the entire 420 foot length of the dam and establish a hearty grass cover. The removal of trees should include the upstream face, crest, downstream face and an area for a minimum distance of 10 feet from the abutments and toe of the earth embankment. Keeping the embankment clear of trees and brush is critical to maintaining the dam in a safe condition. Contact this office if you need guidance on completing this item;

6. Investigate and report on the condition of the low level outlet. If the outlet is inoperable, it should be repaired as necessary restoring it to an easily operating condition;

Prepare and submit as-built plans of the dam and spillway section. At a minimum the plans should be drawn to scale and include a plan view of the entire dam, an elevation view of the downstream face, and a cross section through the spillway; and

- 8 Monitor the crack on the emergency spillway cap and on the downstream stone masonry wall located to the left of the spillway.

Due to the time that has lapsed as well as additional deficiencies observed as a result of the October 1, 2002 inspection, DES will be officially closing out the 1996 LOD and associated Reissued 2001 LOD. Enclosed are copies of both for your reference. It is our hope that the additional deficiencies as well as the outstanding deficiencies will be addressed. Some of the deficiencies herein remain from the 1996 LOD. DES would appreciate your cooperation in bringing this matter to a close. It is important that these deficiencies get addressed in order to ensure the continued safety of this dam.

DES is requesting that you complete and submit the attached "Intent to Complete Repairs" form, within 30 days of receipt of this letter, that will provide for correction of the identified deficiencies by the date(s) indicated above. If you believe changes to the items of work or dates are necessary, please make the changes directly on the form and provide a brief explanation. We have enclosed a self addressed stamped envelope for you to return this form.

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Our intent in sending you this correspondence is to make you aware of items that DES believes warrant your attention to insure the continued safe operation of your dam. It is our hope that, through the submittal of the attached form and a commitment to keeping a well-maintained dam, you will voluntarily comply with the requested items of work. If we do not receive the intent form or a similarly adequate written reply, we will assume that you are in agreement with our findings and recommendations and DES will carry out follow-up inspections accordingly.

If you have any questions or comments regarding this Letter of Deficiency or would like to be present at future inspections, please contact me at 271-3406, or write to the Water Division at the address listed on the top of the previous page.

Sincerely,

**COPY**

Jeffrey M. Blaney  
Dam Safety engineer

Attachments Guideline for an O&M plan, DB8, DB13, Copy of 1996 LOD, Copy of 2001 Reissued LOD  
cc: Gretchen Rule✓

Town of Belmont

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